

LITHOGRAPHIC TEMPLATE AND METHOD OF FORMATION AND USE

Abstract of the Disclosure

5 This invention relates to a lithographic template, a method of forming the lithographic template and a method for forming devices with the lithographic template. The lithographic template (10, 110, 210) is formed having a substrate (12, 112, 212) and a charge dissipation layer (20, 120, 220), and a patterned imageable relief layer, (16, 116, 216) formed on a surface (14, 114, 214) of the substrate (10, 110, 210) using radiation. The template (10, 110, 210) is used in the fabrication of a semiconductor device (344) for affecting a pattern in the device (344) by positioning (338) the template (10, 11, 210) in close proximity to semiconductor device (344) having a radiation sensitive material (334) formed thereon and applying a pressure (340) to cause the radiation sensitive material to flow into the relief image present on the template (10, 110, 210). Radiation (342) is then applied through the template (10, 110, 210) to cure portions of the radiation sensitive material and define the pattern in the radiation sensitive material. The template (10, 110, 210) is then removed to complete fabrication of semiconductor device (344).